#### BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130 Sacramento, California 95833-2936 (916) 263-0916 FAX (916) 263-0959



January 10, 2011

Gary Fitzer, Deputy Building Official Town of Portola Valley 765 Portola Road Portola Valley, CA 94028

Dear Mr. Fitzer:

This letter is to acknowledge receipt on December 16, 2010 of the Town of Portola Valley submittal pertaining to Ordinance No. 2010-388 with findings and is acceptable for filing. Per Health and Safety Code Section 17958.8 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Senior Architect

cc: Chron

Local Filings

# TOWN of PORTOLA VALLEY

Town Hall: 765 Portola Road, Portola Valley, CA,94028 Tel: (650) 851-1700 Fax: (650) 851-4677

December 14, 2010

California Building Standards Commission 2525 Natomas Park Drive, Suite 130 Sacramento, CA 95833-2936

Re: Adoption of the 2010 California Building Code

Dear Sir or Madam:

In accordance with Health & Safety Code Sections 18941.5 and 17558.7, please find enclosed a copy of the Town of Portola Valley Ordinance No. 2010-388 and a copy of the findings necessary to amend the state code.

Sincerely,

Gary Fitzer

**Deputy Building Official** 

Town of Portola Valley 765 Portola Road Portola Valley CA 94028

cc: Town Manager

## ORDINANCE NO. <u>2010 -</u> 388

ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF PORTOLA VALLEY AMENDING SECTION 15.04.010 [DEFINITIONS], SECTION 15.04.020 [AMENDMENTS TO THE BUILDING CODE], AND SECTION 15.04.030 [ADDITIONS TO THE BUILDING CODE] OF CHAPTER 15.04 [BUILDING CODE] OF TITLE 15 [BUILDINGS AND CONSTRUCTION] OF THE PORTOLA VALLEY MUNICIPAL CODE TO ADOPT AN UPDATED BUILDING CODE

WHEREAS, the Town of Portola Valley ("Town") wishes to adopt a building code in accordance with law and to use the most updated regulations in the processing of development in the Town; and

WHEREAS, because of the Town's unique local climatic, geologic and topographic conditions, detailed in the attachment to the staff report, the Town desires to make some amendments and additions to the California Building Code.

NOW, THEREFORE, the Town Council of the Town of Portola Valley does ORDAIN as follows:

- 1. Amendment of Code. Section 15.04.010 [Definitions], Section 15.04.020 [Amendments to the Building Code] and Section 15.04.030 [Additions to the Building Code] of Chapter 15.04 [Building Code] of Title 15 [Buildings and Construction] of the Town of Portola Valley Municipal Code are hereby amended to read as follows:
- **15.04.010 Building Code.** The Town's building code is comprised of the following uniform codes:
  - A. <u>2010 California Building Code</u> (Part 2 of Title 24) Based on the 2009 International Building Code (IBC) published by the International Code Council, with modifications; and
  - B. 2010 California Residential Code (Part 2.5 of Title 24) and Appendices, excluding Appendix I (Private Sewage Disposal) and Appendix O (Gray Water Recycling Systems). Based on the 2009 International Residential Code (IRC) published by the International Code Council, with modifications; and

- C. 2010 California Electrical Code (Part 3 of Title 24) Based on the 2008 National Electrical Code (NEC) published by the National Fire Protection Association; and
- D. <u>2010 California Mechanical Code</u> (Part 4 of Title 24) Based on the 2009 Uniform Mechanical Code (UMC) published by the International Association of Plumbing and Mechanical Officials; and
- E. <u>2010 California Plumbing Code</u> (Part 5 of Title 24) Based on the 2009 Uniform Plumbing Code (UPC) published by the International Association of Plumbing and Mechanical Officials; and
- F. 2008 California Energy Code (Part 6 of Title 24) Previously adopted; and
- G. <u>2010 California Historical Building Code</u> (Part 8 of Title 24, Building Standards) approved by the Commission for the 2007 California Historical Building Code; and
- H. <u>2010 California Fire Code</u> (Part 9 of Title 24) Based on the 2009 International Fire Code (IFC) published by the International Code Council; and
- 2010 California Existing Building Code (Part 10 of Title 24) Appendix Chapter A, Seismic Strengthening Provisions for Unreinforced Masonry Bearing Wall Buildings, based on the 2006 International Existing Building Code (IEBC) International Code Council; and
- J. <u>2010 California Referenced Standards</u> Code (Part 12 of Title 24) Building Standards adopted by the Commission for the 2010 California Referenced Standards Code.
- 15.04.20 Amendments to the Building Code. The following changes and/or modifications to the Building Code are found to be reasonably necessary to mitigate the described impacts which are caused by local climatic, geologic and topographic conditions:
  - A. Chapter 7A of the California Building Code and Section R327 of the California Residential Code is amended to read:
    - All new buildings shall comply with the Materials and Construction Methods for Exterior Wildfire Exposure. No existing residential building or structure shall be required to conform in its entirety to the requirements of this Section, unless the additions, alterations or repairs to the existing building or structure within any twelve month

period affects fifty percent or more of the exterior wall plane surface, or affects fifty percent or more of the floor area.

- a. Where no studs remain or, if some studs remain, the wall except for the studs has been stripped bare such that one can see through the wall, the wall affected by such changes shall be included in computing the amount of affected exterior wall plane surface for the purpose of applying this section.
- b. Where any structural changes are made in the building, such as walls, columns, beams or girders, floor or ceiling joists and covering, roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor area of all rooms affected by such changes shall be included in computing affected floor areas for purposes of applying this section.

## c. Exceptions:

- A one-story detached accessory building used as a tool or storage shed, playhouse, or similar use provided the floor area does not exceed 120 square feet.
- ii. An ornamental landscape structure (e.g. trellis, gazebo) with a projected roof area that does not exceed 120 square feet and that is not attached to a non-exempt structure.
- iii. An animal shade structure with a projected roof area that does not exceed 120 square feet.
- iv. An agricultural building, that is defined as a nonresidential structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticulture products. "Agricultural building" shall include green houses.
- Any addition, alteration, or repair to any new building regardless of cause, size, or location, unless otherwise exempt, shall comply with the requirements as specified in Chapter 7A of the 2010 California Building Code as follows:
  - a. Exterior walls. Exterior walls shall be approved noncombustible or ignition-resistant material, heavy timber, or log wall construction or shall provide protection from the intrusion of flames and embers in accordance with standard SFM 12-7A-1.

- Exception: Nonstructural repairs involving less than ten percent of the exterior wall surface to an existing building or structure within any one-year period are permitted to be made of the same materials of which the building or structure is constructed.
- b. Exterior windows and exterior glazed door assembly requirements. Exterior window, window walls, glazed doors, and glazed openings within exterior doors shall be insulating-glass units with a minimum of one tempered pane on the exterior side, or glass block units, or have a fire-resistance rating of not less than 20 minutes, when tested according to NFPA 257, or in accordance with Section 715, or conform to the performance requirements of SFM 12-7A-2.
- c. Underside of Appendages (exterior decks). The underside of decks shall be enclosed to grade or the underside of the exposed under-floor shall be protected in accordance with the requirements of this chapter.
- 3. Compliance with the vegetation clearance requirements found in 701.A.5 and R327.1.5 of the California Residential Code is not required.
- B. California Building Code Section 904, Automatic Sprinkler Systems Minimum Requirements, is amended to read:
  - 1. The following requirements shall apply to all new buildings or structures requiring a building permit issued by the Town.
    - a. Except as otherwise provided by this section, or as provided under 903.3.1.1 of the 2010 Edition of the California Building Code, automatic fire sprinkler systems shall be installed and maintained in every new building or structure of any type, use, occupancy or size, which requires a building permit issued by the Town.
    - b. The term "automatic fire sprinkler system" as used in this section means an integrated system of underground and overhead piping, including a water supply such as a gravity tank, fire pump, reservoir, pressure tank, or connection by underground piping to a fire main, which complies in all respects with the requirements for such systems contained in standards issued by the National Fire Protection Association based upon occupancy classification.

- 2. The following structures are exempt from the requirements of this section:
  - a. Agricultural Buildings. For the purposes of this section, an "agricultural building" is defined as a non-residential structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products. "Agricultural building" shall include green houses.
  - b. Non-residential structures less than 1,000 square feet in floor area.
- 3. The requirements of this section are intended to represent minimum standards for new construction. Nothing in this section shall prevent the fire authority from adopting and enforcing any regulations, which impose more stringent requirements. Further, any requirements of the California Building Code, the California Fire Code or the State Building Standards Code, which is more restrictive, specifies higher standards or mandates specific locations within a structure for automatic sprinkler systems shall be applicable.
- C. California Residential Code Section R313, Automatic Sprinkler Systems, is amended to read:
  - No existing residential building or structure shall be required to conform to the requirements of this section, unless the existing dwelling is already equipped with an automatic sprinkler system or the additions, alterations or repairs to the existing building or structure within any twelve month period affects fifty percent or more of the exterior wall plane surface, or affects fifty percent or more of the floor area.
    - a. Where no studs remain or, if some studs remain, the wall except for the studs, has been stripped bare such that one can see through the wall, the wall affected by such changes shall be included in computing the amount of affected exterior wall plane surface for the purpose of applying this section.
    - b. Where any structural changes are made in the building, such as walls, columns, beams or girders, floor or ceiling joists and covering, roof rafters, roof diaphragms, foundations, piles or retaining walls or similar components, the floor area of all rooms affected by such changes shall be included in

computing affected floor areas for purposes of applying this section.

- D. California Building Code Section1505, Minimum Roofing Standards for Fire Resistance, is amended to read:
  - 1. The following requirements shall apply to all buildings or structures, which require a building permit issued by the Town.
    - a. The roof covering of every building or structure, and all materials applied as part of a roof covering assembly, shall have a minimum fire rating of Class "A" or higher. Where required by the California Building Code, or other provision of law, roof coverings must meet a higher fire rating.
    - b. Subsection(1)a of this section shall not apply to buildings or structures that are less than 120 square feet in size.
    - c. Not more than twenty-five percent of the roof covering of any building or structure shall be replaced in any twelve month period unless the new roof covering is made to conform with the requirements for new buildings or structures.
  - 2. The requirements of this section are minimum standards. Where the California Building Code, the California Fire Code, or the State Building Standards Code contain higher standards or additional or more stringent requirements than required by this section, those additional or more stringent requirements shall apply. Further, nothing in this section shall prevent the presiding fire authority from adopting and enforcing regulations imposing more stringent requirements.
- E. California Plumbing Code Sect6ion 1211.18, Earthquake-Actuated Gas Shutoff Valves, is adopted.
- 15.04.030 Administration of the Building Code. The following are modifications to the California Building Code to facilitate its administration. California Building Code Chapter 1, Scope and Administration, Divisions I and II are amended to read as follows:
  - A. The *Department of Building* Safety in Section 103 shall mean the "Building Department".
  - B. Section 105.1.1 Annual permit is deleted.

- C. Section 105.2 Work exempt from permit, a building permit shall not be required for the following:
  - 1. One-story detached accessory building used as a tool or storage shed, playhouse, and similar use provided the floor area does not exceed 120 square feet.
  - 2. Movable cases, counters and partitions not over five feet nine inches high.
  - 3. Retaining walls that are not over four feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or III-A liquids.
  - 4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2:1.
  - 5. Platforms and walks, not more than 30 inches above grade and not over any basement or story below.
  - 6. Painting, papering and similar finish work.
  - 7. Window awnings; supported by an exterior wall for Group R, Division 3 (Single Family Residence), and Group U (Private Garage) Occupancies when projecting not more than 54 inches.
  - 8. Prefabricated swimming pools accessory to a Group R, Division 3 Occupancy in which the pool walls are entirely above the adjacent grade, and if the capacity does not exceed 5,000 gallons.

Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above-exempted items.

Exemption from the permit requirements shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of the building code or any other laws or ordinances of the Town, (e.g. Planning/Zoning).

- D. Section 109.6 Refunds is amended as follows:
  - 1. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

- 2. The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.
- 3. The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.
- 4. The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment.
- E. Section 111.2 Certificate issued is amended: After the Building Official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the building department, the building department shall issue a certificate of occupancy that contains the following:
  - 1. The building permit number.
  - 2. The address of the structure.
  - 3. The name of the owner.
  - 4. The name of the contractor.
  - 5. A description of the structure for which the certificate was issued.
  - 6. The type of construction as defined in Chapter 6.
  - 7. The name of the Planning Manager and Building Official.
  - 8. Any special stipulations and conditions of the building permit.
- F. Section 112 Board of Appeals shall mean Town Council.
- **2.** Environmental Review. Pursuant to Guideline Section 15061(b)(3) of the California Environmental Quality Act (CEQA), this ordinance is exempt from the provisions of the CEQA, as it does not have a potential for causing a significant effect on the environment.
- 3. Severability. If any part of this ordinance is held to be invalid or inapplicable to any situation by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance or the applicability of this ordinance to other situations.
- 4. Effective Date; Posting. This ordinance shall become effective thirty days after the date of its adoption and shall be posted within the Town in three public places.

INTRODUCED:

November 10, 2010

PASSED:

December 8, 2010

AYES:

Councilmembers Toben and Richards, Vice Mayor Derwin and

Mayor Driscoll

NOES:

None

ABSTENTIONS:

None

ABSENT:

Councilmember Wengert

Mayor

ATTEST:

.

APPROVED AS TO FORM:

Town Attorney

## FINDINGS FOR LOCAL AMENDMENTS

Pursuant to State Law, including but not limited to Sections 13143.5, 18941.5, 17958.5 and 17958.7 of the California Health and Safety Code, the Town Council of the Town of Portola Valley finds that the changes or modifications to the Building Code set forth in Ordinance No. 2010-388 are reasonably necessary due to certain local climatic, geologic and topographic conditions as described below.

## I. CLIMATIC

## (a) Conditions

Precipitation ranges from 15 to 24 inches per year with an average of approximately 20 inches per year. Ninety-six percent of the precipitation falls during the months of October through April, and four percent from May through September, leaving a dry period of at least five months each year. Relative humidity remains in the middle range most of the time, ranging from 45 to 65 percent in the winter, but occasionally falling as low as 15 percent. Temperatures from June through September average above 80°F. It is not unusual to experience several continuous days with temperatures in the mid to high 90s. Prevailing winds in the area come from the west. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 12-MPH range, gusting from 25 to 35 MPH.

## (b) Impact

Locally experienced dry periods cause extreme dryness of untreated wood shakes and shingles on buildings and non-irrigated grass, brush, and weeds, which are often near buildings with wooden roofs. Such dryness causes these materials to rapidly ignite and burn intensely. Because of dryness, a rapidly burning grass fire or exterior building fire will quickly transfer to other buildings with dry shake or shingle roofs by means of radiation or flying brands, sparks and embers. Where there are large and/or numerous buildings with untreated shake or shingle exteriors, a small fire can rapidly grow to a magnitude beyond the control capabilities of the Fire Department, resulting in an excessive fire loss to the community.

The average rainfall is frequently surpassed by concentrated periods of heavy rainfall. This factor combined with soil types, terrain, and existing road systems, have led to landslides and flooding across both Town and private road systems. The blockage of access routes delays and/or prevents the ability of fire apparatus to respond to emergency scenes. Although the Town has identified roads traditionally susceptible to closure, clearing of these routes remains dependent upon knowledge and availability of resources. During 1997 and 1998, partial or complete road blockages were identified on Alpine Road, Wayside Road, Minoca Road, and Escobar Road.

In addition to causing fires to burn and spread rapidly, wind(s) frequently cause(s) tree limbs to break and trees to fall, which can damage electrical transmission lines. Fallen power lines not only cause power outages but, also spark fires. Local winds will continue to be a definite factor of major fire loss to buildings lacking ignition-resistant construction, fire resistive roofs and automatic sprinkler systems.

## II. GEOLOGIC

## (a) Conditions

The Town is located in close proximity to the San Andreas Fault. Buildings and other structures can experience major seismic damage, such as in the Loma Prieta earthquake in 1989. The area is replete with various soils and areas with significant movement potential.

## (b) Impact

A major earthquake could result in the cutting-off of response routes of fire companies by damaged and/or blocked roads. Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities, which, in turn, can cause power failures and start fires throughout the Town and County. The occurrence of multiple fires will quickly disperse existing Fire Department resources, thereby reducing and/or delaying their response to any given fire. Even minor seismic activity has an adverse impact on fire protection. Any earth movement which causes buildings to move creates cracking and warping of walls, smoke barriers, door frames, etc., thereby negating the effectiveness of building elements intended to prevent fire and smoke from spreading within the building.

Additionally, these soils are susceptible to seismic shock and moisture concentrations that may result in landslides in hilly and creek-side areas along fire department access/response routes. Such restriction of response routes can result in major fire losses in locations where buildings are covered with untreated wood shakes or shingles, particularly where these structures have no automatic fire protection systems such as sprinklers.

## III. TOPOGRAPHIC

## (a) Conditions

Large areas of highly combustible dry grass, weeds, brush, and trees adjacent to structures are common throughout the Town. Above ground electrical power transmission lines are suspended through trees and above large areas of dry vegetation. The hilly terrain, limited surface streets, and arrangement of manmade features around many buildings preclude, or greatly limit, any approach to all but one side.

## (b) Impact

Above ground electrical transmission lines are subject to damage from overloading, winds, trees, earthquakes, and motor vehicle collisions. Fires involving large areas of dry vegetation can quickly grow to a magnitude beyond local Fire Department capabilities. The limited number of response routes and the lack of feasible alternate routes compound this problem. Additional delays must be anticipated due to attempts on the part of residents to flee or enter the fire area. Fire damage from these delays results in the need for additional suppression resources to obtain control. The combination of buildings with untreated wood shake or shingle roofs and without fire sprinkler systems and impeded access for the Fire Department can readily result in multiple building fires and major fire losses.